Serial No. 10/708,938 - Davids et al.

Art Unit: 3742 – Attorney Docket 10015

Response to March 1, 2005 Claim Objections and Claim Rejections

Page 2 of 6

## **Amendments to the Claims:**

Claim 1(twice amended) A method for workpiece movement and positioning

loading the a workpiece;

comprising the steps of:

moving the said workpiece linearly to a predetermined location;

stopping the said linear movement of the said workpiece at the said predetermined

location;

returning the said workpiece to its original location;

and unloading the said workpiece;

and-the-optional step of:

constantly rotating-the said workpiece when-the said workpiece is moving linearly or at the said predetermined location;

and the optional steps of:

not constantly rotating-the said workpiece when-the said workpiece is moving linearly or at the said predetermined location and instead holding-the said workpiece in a fixed position for a predetermined period of time;

Serial No. 10/708,938 - Davids et al.

Art Unit: 3742 – Attorney Docket 10015

Response to March 1, 2005 Claim Objections and Claim Rejections

Page 3 of 6

and the optional steps of:

 $\hbox{not constantly rotating-} \hbox{the said workpiece when-} \hbox{the said workpiece is moving linearly or at}$ 

the said predetermined location and instead holding-the said workpiece in a fixed

position for a predetermined period of time;

lowering the said workpiece a predetermined distance;

indexing-the said workpiece by rotating-the said workpiece a predetermined

incremental amount;

raising-the said workpiece back into position;

holding-the said workpiece in a fixed position for a predetermined amount of time;

and

repeating the said lowering, indexing, raising and holding steps until the workpiece

has been indexed 360 degrees or less as required by-the said workpiece.

Claim 2 (original) The method as set forth in claim 1 including an induction coil and

quench means; the step of activating the induction coil and quench means as the

workpiece travels linearly to harden the workpiece.

Claim 3 (cancelled)

Serial No. 10/708,938 – Davids et al.

Art Unit: 3742 - Attorney Docket 10015

Response to March 1, 2005 Claim Objections and Claim Rejections

Page 4 of 6

Claim 4 (original) The method as set forth in claim 1 including an induction coil and quench means; the step of activating the induction coil and quench means while the workpiece is being held in position.

Claim 5 (original) The method of claim 1 including any of the means for milling, drilling, welding, assembling, stamping, marking or bending; including the step of activating the means for milling, drilling, welding, assembling, stamping, marking or bending.

Claim 6 (original) A workpiece movement and positioning device, the workpiece being located on center with the movement and positioning device, the workpiece movement and positioning device comprising:

a frame for attaching the workpiece movement and positioning device;

a computer or control mechanism for turning on and off the workpiece movement

and positioning device and other components and/or attachments;

an actuator consisting of a ball screw/ball spline assembly with servo motors and a

lift shaft for providing the linear and rotational movement of the workpiece such that

the workpiece can be caused to move linearly, linear and hold, linearly with rotation,

and/or lift and index;

Serial No. 10/708,938 – Davids et al.

Art Unit: 3742 – Attorney Docket 10015

Response to March 1, 2005 Claim Objections and Claim Rejections

Page 5 of 6

a means for moving the lift shaft linearly without undue bending or flexing;

a means for holding the workpiece in position on the lift shaft;

a manual safety switch to prevent the device from being operated unintentionally.

Claim 7 (original) The workpiece movement and positioning device of claim 6 further comprising shielding and drain pans to contain any quench fluid and as a

safety guard.

Claim 8 (original) The workpiece movement and positioning device of claim 7 -

further comprising induction hardening and quenching means wherein the

workpiece and hardening means can be operated in either a scan hardening process,

a pop up induction hardening process and/or a lift and index hardening process.

Claim 9 (original) The workpiece movement and positioning device of claim 7 further

comprising other working tools controlled by the computer to perform work in the

workpiece.